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PTOL-90A (Rev. 04/07)

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

MAILED

Application Number: 09/982,236
Filing Date: October 19, 2001
Appellant(s): GAUSSIER ET AL.

JUL 3 1 2007

Technology Center 2100

Aaron J. Capron
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 05/31/2007 appealing from the Office action mailed

3/1/2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings

which will directly affect or be directly affected by or have a bearing on the Board's decision in

the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in

the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,742,003	HECJERMAN	05-2004
6,460,025	FOHN	10-2002

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1 – 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heckerman et al

(U.S. 6,742,003 B2) in view of Fohn et al (U.S. 6,460,025 B1).

♦ As per claim 1, 8, 10, 12 – 16, 20 – 23,

Heckerman et al (U.S. 6,742,003 B2) discloses a method for clustering a plurality of documents (See the title of Heckerman) comprised of a plurality of clusters (see Fig. 3A - 3K), wherein each document includes a plurality of words (attributes) (col. 27, lines 67), the method comprising:

- " Accessing the document collection" corresponds to the collection storage component 801 (See Fig. 8, col. 19, lines 27 – 30 of Heckerman).

- " Performing a clustering process that creates a hierarchy of clusters that reflects a segregation of the documents in the collection based on the words included in the documents" corresponds to the clustering process that form the hierarchical tree (See Fig. 11, 15, col. 20, lines 29 – 49, col. 24, lines 65 – col. 25 lines 35, col. 28, line 1 of Heckerman). The segment of the document (see the abstract, col. 21, lines 61 – 64, col. 25, lines 36 – 47 of Heckerman)

- " Wherein the first and second clusters are associated with different paths of the hierarchy" See Fig. 7 of Heckerman where there is multiple paths in the hierarchy.

- " Storing a representation of the hierarchy of clusters in a memory" See Fig. 8, element 803, Fig. 15, col. 25, lines 15 – 17 of Heckerman.

- " Making the representation available to an entity in response to a request associated with the document collection" See Fig. 15, col. 26, lines 43 – 47 of Heckerman.

Heckerman does not clearly disclose " Wherein any document in the collection may be assigned to a first cluster in the hierarchy based on a first segment of the respective document, and the respective document may be assigned to a second cluster in the hierarchy based on a second segment of the respective document" Heckerman only mentions that the document has n attributes (col. 27, line 67), and based on the matches or those attribute settings, a document can

belong to multiple clusters in the hierarchical tree and therefore, forming a multi level

hierarchical organizations (col. 5, lines 21 – 28 of Heckerman).

However, on the other hand, Fohn discloses a method for improving use browsing through

hierarchies of information (see the abstract of Fohn). Fohn teaches that "entity relevance is

calculated for the entities in the hierarchies, and this information is used to guide the user in his

exploration (see the abstract of Fohn). Especially, Fohn teaches that "the entities e5 and e6

(elements 445 and 450 of Fig. 4) are common to the hierarchies of both these root nodes, and

traversing from root node n1 to root node n4 would therefore not yield an empty solution state"

(col. 14, lines 52 – 56 of Fohn). Clearly Fohn teaches that an entity can be placed in two different

categories (or cluster or nodes). Fig. 4, Fohn discloses that entity e4 (445) can be belong to node

n1 and n4. Fig. 6A, Fohn also disclose another example of entity 613, which can be belong to

"group Portrait" and "Birthday" nodes depend on different perspective on the camera product set

(col. 20, lines 51 – 60 of Fohn).

It would have been obvious to one with ordinary skill in the art at the time the invention was

made to apply the teaching of Fohn into the invention of Heckerman because the combination

would "provide a powerful flexible technique for locating entities in a large information space

using hierarchical navigation and browsing of these one or more hierarchies". (Col. 24, lines 14 –

17 of Fohn). The combination system would enables a user to search for a solution meeting his

selected constrains from a multi-perspective viewpoint, guiding him through ascent and descent

in a hierarchy as well as lateral exploration and movement to other hierarchies (col. 24, lines 19

– 23 of Fohn).

♦ As per claims 2, 9, 11, 17 - 18, the combination of Heckerman and Fohn disclose:

  - " Assigning the document collection to a first class ... setting a probability parameter to

    an initial value ...determining ... first class" See Fig. 11, Fig. 15 and corresponding texts

    of Heckerman.

♦ As per claims 3, 19, the combination of Heckerman and Fohn disclose:

  - " Determining whether the first class has split into two child classes" See Fig. 11 where

    there are two categories in a set.

♦ As per claim 4, the combination of Heckerman and Fohn disclose:

  - " Repeating the step of determining for each document in the collection" See Fig. 11 of

    Heckerman.

♦ As per claims 5 – 7, the combination of Heckerman and Fohn disclose:

  - " Performing the clustering process" See Fig. 15 and corresponding texts.

♦ As per claims 24 - 25, the combination of Heckerman and Fohn disclose:

  - "Wherein the representation defines the probability of a document as the product of the

    probability of the (document, word) pairs it contains" (See Fig. 16 - 18 and associated

    texts of Heckerman).

♦ As per claim 26, the combination of Heckerman and Fohn disclose:

  - The form of probability model (See col. 2, lines 1 – 17, Fig. 6A – 6B of probability).

    (10) Response to Argument

    ♦ The following is the brief summary of the claimed invention: Appellant claimed a

method for creating a hierarchy of cluster of document that based on words included in the

document, wherein the document can be assigned to different clusters.

♦ Heckerman et al (U.S. 6,742,003) discloses a method/system for clustering document

based on similarity measures of segments or segment group (see abstract).

♦Fohn et al (U.S. 6,460,205) discloses a method/system for hierarchy cluster information

(see abstract). Fohn teaches that the entities (information) can be assigned to different categories

based on entities attributes (See Fig. 6A, col. 22, lines 48 – 54).

A. **Appellant argues that Heckerman in view of Fohn fail to disclose each and every**

limitation of the claims. The Examiner respectfully disagrees.

♦ *Appellant argues that Fohn fails to teach "assign documents to both first and second clusters*

based on segments within the same documents used to create the hierarchy of cluster". The

Examiner respectfully disagrees.

Referring to Fig. 4, Fohn teaches an example of calculating entity relevance and node

feasibility. Fohn especially teaches "the node n4 is another feasible choice from current node n1:

the entities e5 and e6 (element 445 and 450 of Fig. 4) are common to the hierarchies of both

these root nodes" [col. 14, lines 52 –54, Fohn].

Referring to Fig. 6A – 6B, Fohn teach "Fig. 6A classifies the cameras according to an

application, or type of use, perspective; Fig. 6B classifies the cameras according to an operating

conditions perspective" [col. 20, lines 59 – 62, Fohn]. Further, Fohn teaches that "Camera E 615,

on the other hand, may be used in landscape 603 applications or in special occasion 604

application, and in particular in wedding 608 application" [col. 20, lines 67 – col. 21 lines 3].

Clearly, Fohn teaches a method/ system that categories the entities based on their

attributes, and one entities can be assigned to a first node (cluster) and second node (second

cluster) based on segments (application type, operating condition, or attributes of the entities) within the same document (entity, product) used to create the hierarchy of cluster (Fig. 6A- 6C).

♦ *Appellant argues "because Fohn requires a pre-existing relationship, Fohn cannot supplement Heckerman's creation of a hierarchy of cluster based on a collection of documents when a document of this collection can be applied to both a first and second cluster of the hierarchy being created". The Examiner respectfully disagrees.*

Referring to col. 9, lines 51 – 52, Fohn teaches "Structure relevance may be calculated in a prior or in a **dynamic** manner"; and "structure relevance may be **computed dynamically** as exploration proceeds" [col. 9, lines 61 – 62]. Therefore, in this case, Fohn does not require a pre-existing relationship in order to create the hierarchy of cluster.

B. **One of ordinary skill in the art would not have a reason to combine Fohn into Heckerman. The Examiner respectfully disagrees.**

The Federal Circuit has embraced a theory of prima facie obviousness for use in ex parte prosecution in the PTO. The prima facie case is a procedural tool that, as used in patent examination, means not only that the evidence of the prior art would reasonably allow the conclusion that the examiner seeks, but also that the prior art compels such a conclusion if the Appellant produces no evidence or argument to rebut it. See *In re Spada*, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Cir. 1990). In the instant case, the prior art compels the conclusion that the claimed invention is unpatentable under 35 U.S.C. §103(a) as set forth in the Office Action, mailed March 1, 2007, and reiterated above for convenience.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on

obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Heckerman et al (U.S. 6,742,003) discloses a method/system for clustering document based on similarity measures of segments or segment group (see abstract). Fohn et al (U.S. 6,460,205) discloses a method/system for hierarchy cluster information (see abstract). Fohn teaches that the entities (information) can be assigned to different categories based on entities attributes (See Fig. 6A, col. 22, lines 48 – 54). It would have been obvious to one with ordinary skill in the art at the time the invention was made to apply the teaching of Fohn into the invention of Heckerman because the combination would "provide a powerful flexible technique for locating entities in a large information space using hierarchical navigation and browsing of these one or more hierarchies". (Col. 24, lines 14 – 17 of Fohn). The combination system would enables a user to search for a solution meeting his selected constrains from a multi-perspective viewpoint, guiding him through ascent and descent in a hierarchy as well as lateral exploration

and movement to other hierarchies (col. 24, lines 19 – 23 of Fohn). Both prior arts teach similar

subject matters and are in the same field of endeavor of the claimed invention. Therefore, it is

submitted that combining **Heckerman** and **Fohn** would have arrived at the claimed invention.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related

Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.
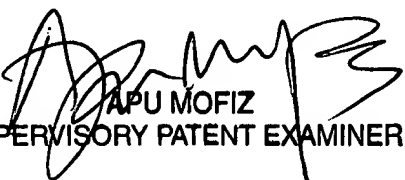
Respectfully submitted,

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Patent Examiner – Art Unit 2161

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